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Akihiko Oda

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EXAMINER

KIM, JUNG W

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/801,339	Applicant(s) ODA, AKIHIKO	
	Examiner JUNG KIM	Art Unit 2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office action is in response to the after final amendment filed on 7/29/08.
2. Claims 7-20 are pending.

Response to Arguments

3. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.
4. Applicant's arguments, with respect to the prior art rejection(s) of the claim(s) under Candelore have been fully considered and are persuasive. Therefore, the rejections have been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Imai and Sato. See MPEP 706.07(e).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 7 is rejected under 35 U.S.C. 102(b) as being anticipated by Sato et al. US 20020066025 (hereinafter Sato).
7. As per claim 7, Sato discloses a data decoding device comprising:

- a. encryption key extracting means for extracting a portion of compressed data, acquired by compressing data by a compression processing, as encryption key data; encryption means for encrypting the compressed data by changing the portion, extracted as the encryption key data, of the compressed data;
(paragraphs 53-55) and
- b. compressed data decoding means for decoding the encrypted data back to the compressed data by combining the encryption key data and the encrypted data, both of which have been generated from the same compressed data.
(paragraphs 49 and 56-57)

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 8-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imai US 5,512,977 (hereinafter Imai) in view of Sato et al. US 20020066025 (hereinafter Sato).
10. As per claims 8-11, Imai discloses an image data storing device (fig. 6 and related text) comprising:

- c. compression means for compressing image data by a compression processing; (reference no. 12)
 - d. encryption means for encrypting the compressed data by changing the portion of the compressed data using an encryption key; (reference no. 2)
 - e. compressed data decoding means for: decoding the encrypted data back to the compressed data; (reference no. 2) and
 - f. expansion means for expanding the compressed data decoded by the compressed data decoding means back to the image data; (reference no. 13)
11. Imai does not disclose encryption key extracting means for extracting a portion of the compressed data as encryption key data; encryption means for encrypting the compressed data by changing the portion, extracted as the encryption key data, of the compressed data; encryption key storing means for storing the encryption key data extracted by the encryption key extracting means; encrypted data storing means for storing the encrypted data acquired by encrypting the compressed data by the encryption means; management information storing means for storing management information showing correspondence between the encryption key data and the encrypted data both of which have been acquired from the same compressed data; compressed data decoding means for: (i) extracting the encryption key data and the encrypted data, both of which have been acquired from the same compressed data, from the encryption key storing means and the encrypted data storing means based on the management information stored in the management information storing means, and (ii) combining and decoding the extracted encryption key data and the extracted

encrypted data back to the compressed data; wherein the encryption means replaces the portion, extracted as the encryption key data, of the compressed data with data different from the encryption key data; wherein the encryption means deletes the portion, extracted as the encryption key data, of the compressed data; wherein the encryption means adds other data to the portion, extracted as the encryption key data, of the compressed data; wherein a predetermined range from a beginning of the compressed data is made the encryption key data.

12. Sato discloses an electronic data distribution method whereby data is distributed securely without the use of traditional encryption methodology. Paragraphs 51-57. Sato discloses this feature of the invention is desirable because music distribution methods that rely on conventional encryption keys are risky: conventional encryption keys could be broken. Paragraphs 5-7. In particular, Sato discloses a data storing device comprising:

- g. compression means for compressing digital data by a compression processing; (paragraph 53)
- h. encryption key extracting means for extracting a portion of the compressed data as encryption key data; encryption means for encrypting the compressed data by changing the portion, extracted as the encryption key data, of the compressed data; (paragraph 53, "add-on data")
- i. encryption key storing means for storing the encryption key data extracted by the encryption key extracting means; encrypted data storing means for storing

the encrypted data acquired by encrypting the compressed data by the encryption means; (paragraph 36)

j. management information storing means for storing management information showing correspondence between the encryption key data and the encrypted data both of which have been acquired from the same compressed data; (paragraph 49)

k. compressed data decoding means for: (i) extracting the encryption key data and the encrypted data, both of which have been acquired from the same compressed data, from the encryption key storing means and the encrypted data storing means based on the management information stored in the management information storing means, and (ii) combining and decoding the extracted encryption key data and the extracted encrypted data back to the compressed data; (paragraph 49) and

l. expansion means for expanding the compressed data decoded by the compressed data decoding means back to the digital data; (paragraphs 49, 53 and 59)

m. wherein the encryption means replaces the portion, extracted as the encryption key data, of the compressed data with data different from the encryption key data; (paragraph 55)

n. wherein the encryption means deletes the portion, extracted as the encryption key data, of the compressed data; (the original portion is removed)

- o. wherein the encryption means adds other data to the portion, extracted as the encryption key data, of the compressed data; (paragraph 55)

13. It would be obvious to one of ordinary skill in the art at the time the invention was made for the invention of Imai to include encryption key extracting means for extracting a portion of the compressed data as encryption key data; encryption means for encrypting the compressed data by changing the portion, extracted as the encryption key data, of the compressed data; encryption key storing means for storing the encryption key data extracted by the encryption key extracting means; encrypted data storing means for storing the encrypted data acquired by encrypting the compressed data by the encryption means; management information storing means for storing management information showing correspondence between the encryption key data and the encrypted data both of which have been acquired from the same compressed data; compressed data decoding means for: (i) extracting the encryption key data and the encrypted data, both of which have been acquired from the same compressed data, from the encryption key storing means and the encrypted data storing means based on the management information stored in the management information storing means, and (ii) combining and decoding the extracted encryption key data and the extracted encrypted data back to the compressed data; wherein the encryption means replaces the portion, extracted as the encryption key data, of the compressed data with data different from the encryption key data; wherein the encryption means deletes the portion, extracted as the encryption key data, of the compressed data; wherein the encryption means adds other data to the portion, extracted as the encryption key data,

of the compressed data; wherein a predetermined range from a beginning of the compressed data is made the encryption key data. One would be motivated to do so to provide a secure means of distributing digital information while avoiding the risks of distribution methods that rely on encryption keys, which can be broken as disclosed by Sato, paragraphs 5-7. The aforementioned cover the limitations of claims 8-11.

14. As per claim 12, the rejection of claim 8 under 35 USC 103(a) as being unpatentable over Imai in view of Sato is incorporated herein. Although Sato does not expressly disclose forming the encryption key data from a predetermined range from a beginning of the compressed data, it is notoriously well known in the art that the beginning portions of digital data comprise header information relevant to the remaining digital information; such header information is critical to decode the remainder of the data. Official notice of this teaching is taken. Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to form the encryption key data from a predetermined range from a beginning of the compressed data. One would be motivated to do so to withhold pertinent control information of the digital data as known to one of ordinary skill in the art. The aforementioned cover the limitations of claim 12.

15. As per claims 13-18, Imai discloses an image data storing device (fig. 6 and related text) comprising:

- p. compression means for compressing image data by a compression processing; (reference no. 12)
 - q. encryption means for encrypting the compressed data by changing the portion of the compressed data using an encryption key; (reference no. 2)
 - r. compressed data decoding means for: decoding the encrypted data back to the compressed data; (reference no. 2) and
 - s. expansion means for expanding the compressed data decoded by the compressed data decoding means back to the image data; (reference no. 13)
16. Imai does not disclose encryption key extracting means for extracting a portion of the compressed data, as encryption key data; encryption means for encrypting the compressed data by changing the portion, extracted as the encryption key data, of the compressed data; encrypted data storing means for storing the encrypted data acquired by encrypting the compressed data by the encryption means; decoding information outputting means for outputting the encryption key data extracted by the encryption key extracting means and specific information which identifies the encrypted data corresponding to the encryption key data in a predetermined form to an external user; decoding information inputting means for inputting the encryption, key data and the specific information; compressed data decoding means for: (i) extracting the encrypted data corresponding to the specific information, input through the decoding information inputting means, from the encrypted data storing means, and (ii) combining and decoding the encrypted data and the input encryption key data back to the compressed data; wherein the compression processing is a processing whereby the compressed

data cannot be expanded if the portion of the compressed data is changed; wherein the encryption means replaces the portion, extracted as the encryption key data, of the compressed data with data different from the encryption key data; wherein the encryption means deletes the portion, extracted as the encryption key data, of the compressed data; wherein the encryption means adds other data to the portion of the compressed data extracted as the encryption key data; wherein a predetermined range from a beginning of the compressed data is made the encryption key data.

17. Sato discloses an electronic data distribution method whereby data is distributed securely without the use of traditional encryption methodology. Paragraphs 51-57. Sato discloses this feature of the invention is desirable because music distribution methods that rely on conventional encryption keys are risky: conventional encryption keys could be broken. Paragraphs 5-7. In particular, Sato discloses a data storing device comprising:

- t. compression means for compressing digital data by a compression processing; encryption key extracting means for extracting a portion of the compressed data, as encryption key data; encryption means for encrypting the compressed data by changing the portion, extracted as the encryption key data, of the compressed data; (paragraph 53, "add-on data")
- u. encrypted data storing means for storing the encrypted data acquired by encrypting the compressed data by the encryption means; (paragraph 36) and
- v. decoding information outputting means for outputting the encryption key data extracted by the encryption key extracting means and specific information

which identifies the encrypted data corresponding to the encryption key data in a predetermined form to an external user; (paragraph 49)

w. decoding information inputting means for inputting the encryption, key data and the specific information; (paragraph 49)

x. compressed data decoding means for: (i) extracting the encrypted data corresponding to the specific information, input through the decoding information inputting means, from the encrypted data storing means, and (ii) combining and decoding the encrypted data and the input encryption key data back to the compressed data; (paragraph 49) and

y. expansion means for expanding the compressed data decoded by the compressed data decoding means back to the digital data; (paragraphs 49, 53 and 59)

z. wherein the compression processing is a processing whereby the compressed data cannot be expanded if the portion of the compressed data is changed; (paragraph 59)

aa. wherein the encryption means replaces the portion, extracted as the encryption key data, of the compressed data with data different from the encryption key data; (paragraph 55)

bb. wherein the encryption means deletes the portion, extracted as the encryption key data, of the compressed data; (the original portion is removed)

cc. wherein the encryption means adds other data to the portion of the compressed data extracted as the encryption key data; (paragraph 55)

dd. wherein a predetermined range from a beginning of the compressed data is made the encryption key data. (9:35-45; 10:56-62)

18. It would be obvious to one of ordinary skill in the art at the time the invention was made for the invention of Imai to include encryption key extracting means for extracting a portion of the compressed data, as encryption key data; encryption means for encrypting the compressed data by changing the portion, extracted as the encryption key data, of the compressed data; encrypted data storing means for storing the encrypted data acquired by encrypting the compressed data by the encryption means; decoding information outputting means for outputting the encryption key data extracted by the encryption key extracting means and specific information which identifies the encrypted data corresponding to the encryption key data in a predetermined form to an external user; decoding information inputting means for inputting the encryption, key data and the specific information; compressed data decoding means for: (i) extracting the encrypted data corresponding to the specific information, input through the decoding information inputting means, from the encrypted data storing means, and (ii) combining and decoding the encrypted data and the input encryption key data back to the compressed data; wherein the compression processing is a processing whereby the compressed data cannot be expanded if the portion of the compressed data is changed; wherein the encryption means replaces the portion, extracted as the encryption key data, of the compressed data with data different from the encryption key data; wherein the encryption means deletes the portion, extracted as the encryption key data, of the compressed data; wherein the encryption means adds other data to the portion of the

compressed data extracted as the encryption key data; wherein a predetermined range from a beginning of the compressed data is made the encryption key data. One would be motivated to do so to provide a secure means of distributing digital information while avoiding the risks of distribution methods that rely on encryption keys, which can be broken as disclosed by Sato, paragraphs 5-7. The aforementioned cover the limitations of claims 13-18.

19. As per claim 19, the rejection of claim 13 under 35 USC 103(a) as being unpatentable over Imai in view of Sato is incorporated herein. Although Sato does not expressly disclose forming the encryption key data from a predetermined range from a beginning of the compressed data, it is notoriously well known in the art that the beginning portions of digital data comprise header information relevant to the remaining digital information; such header information is critical to decode the remainder of the data. Official notice of this teaching is taken. Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to form the encryption key data from a predetermined range from a beginning of the compressed data. One would be motivated to do so to withhold pertinent control information of the digital data as known to one of ordinary skill in the art. The aforementioned cover the limitations of claim 19.

20. As per claim 20, Imai discloses an image forming apparatus comprising:

- ee. Reading means for reading an original document to capture image data corresponding to the original document (reference no. 1);
 - ff. compression means for compressing image data by a compression processing; (reference no. 12)
 - gg. encryption means for encrypting the compressed data by changing the portion of the compressed data using an encryption key; (reference no. 2)
 - hh. compressed data decoding means for: decoding the encrypted data back to the compressed data; (reference no. 2) and
 - ii. expansion means for expanding the compressed data decoded by the compressed data decoding means back to the image data; (reference no. 13) and
 - jj. printing means for forming and outputting an image corresponding to the expanded image data on a recorded paper. (reference no. 3)
21. Imai does not disclose encryption key extracting means for extracting a portion of the compressed data as encryption key data; encryption means for encrypting the compressed data by changing the portion, extracted as the encryption key data, of the compressed data; encryption key storing means for storing the encryption key data extracted by the encryption key extracting means; encrypted data storing means for storing the encrypted data acquired by encrypting the compressed data by the encryption means; management information storing means for storing management information showing correspondence between the encryption key data and the encrypted data both of which have been acquired from the same compressed data;

compressed data decoding means for: (i) extracting the encryption key data and the encrypted data, both of which have been acquired from the same compressed data, from the encryption key storing means and the encrypted data storing means based on the management information stored in the management information storing means, and (ii) combining and decoding the extracted encryption key data and the extracted encrypted data back to the compressed data; wherein the encryption means replaces the portion, extracted as the encryption key data, of the compressed data with data different from the encryption key data; wherein the encryption means deletes the portion, extracted as the encryption key data, of the compressed data; wherein the encryption means adds other data to the portion, extracted as the encryption key data, of the compressed data; wherein a predetermined range from a beginning of the compressed data is made the encryption key data.

22. Sato discloses an electronic data distribution method whereby data is distributed securely without the use of traditional encryption methodology. Paragraphs 51-57. Sato discloses this feature of the invention is desirable because music distribution methods that rely on conventional encryption keys are risky: conventional encryption keys could be broken. Paragraphs 5-7. In particular, Sato discloses a data storing device comprising:

kk. compression means for compressing digital data by a compression processing; (paragraph 53)

ll. encryption key extracting means for extracting a portion of the compressed data as encryption key data; encryption means for encrypting the

compressed data by changing the portion, extracted as the encryption key data, of the compressed data; (paragraph 53, “add-on data”)

mm. encryption key storing means for storing the encryption key data extracted by the encryption key extracting means; encrypted data storing means for storing the encrypted data acquired by encrypting the compressed data by the encryption means; (paragraph 36)

nn. management information storing means for storing management information showing correspondence between the encryption key data and the encrypted data both of which have been acquired from the same compressed data; (paragraph 49)

oo. compressed data decoding means for: (i) extracting the encryption key data and the encrypted data, both of which have been acquired from the same compressed data, from the encryption key storing means and the encrypted data storing means based on the management information stored in the management information storing means, and (ii) combining and decoding the extracted encryption key data and the extracted encrypted data back to the compressed data; (paragraph 49) and

pp. expansion means for expanding the compressed data decoded by the compressed data decoding means back to the digital data; (paragraphs 49, 53 and 59)

23. It would be obvious to one of ordinary skill in the art at the time the invention was made for the invention of Imai to include encryption key extracting means for extracting

a portion of the compressed data as encryption key data; encryption means for encrypting the compressed data by changing the portion, extracted as the encryption key data, of the compressed data; encryption key storing means for storing the encryption key data extracted by the encryption key extracting means; encrypted data storing means for storing the encrypted data acquired by encrypting the compressed data by the encryption means; management information storing means for storing management information showing correspondence between the encryption key data and the encrypted data both of which have been acquired from the same compressed data; compressed data decoding means for: (i) extracting the encryption key data and the encrypted data, both of which have been acquired from the same compressed data, from the encryption key storing means and the encrypted data storing means based on the management information stored in the management information storing means, and (ii) combining and decoding the extracted encryption key data and the extracted encrypted data back to the compressed data. One would be motivated to do so to provide a secure means of distributing digital information while avoiding the risks of distribution methods that rely on encryption keys, which can be broken as disclosed by Sato, paragraphs 5-7. The aforementioned cover the limitations of claim 20.

Communications Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jung W. Kim whose telephone number is 571-272-3804. The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Jung Kim/
Primary Examiner, AU 2132